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Two Feather Mite Genera (*Analgoidea, Proctophyllodidae*) from Birds of the Families Oxyruncidae and Pipridae (*Passeriformes, Tyranni*)

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ABSTRACT

The genus *Hemipterodectes* Berla is redefined and the type species, *H. squalocauda* is figured. A new genus, *Diproctophyllodes* (type species, *Proctophyllodes* (*Alloptes*) *dielytra* Trouessert, 1885) is described; *D. exquisita* (Berla), 1959 is synomized with *D. dielytra*; and *D. oxyrunci*, new species, is described.

WARREN T. ATYEO J. GAUD

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Two Feather Mite Genera *(Analgoidea, Proctophyllodidae)* from Birds of the Families Oxyruncidae and Pipridae *(Passeriformes, Tyranni).*

Birds of the suborder Tyranni are primarily from the New World (except Acanthisittidae, Philepittidae, and Pittidae) and most species are nonmigratory (except Tyrannidae). From the behavior of the hosts, it is reasonable to expect unique and limited numbers of feather mite species from birds of this suborder. Since 1959 variously modified proctophyllodine mites have been described from seven of the thirteen families of the Tyranni. On the basis of the independent pregenital apodeme of the females (i.e., not connected to epimerites III), each of these mite taxa are more closely related to the genus *Proctophyllodes* Robin than to the genus *Pterodectes* Robin, each is unique in one or more morphological characters, and each has a limited host range.

These bird families, their parasites and the geographical areas from which the parasites are known to occur are:

Cotingidae—Mexico

Nycteridocaulus tyranni Atyeo, 1966

Oxyruncidae—Brazil, Paraguay, Venezuela

Hemipterodectes squalocauda Berla, 1959 (monobasic)

Diproctophyllodes oxyrunci, n.g., n. sp.

Philepittidae—Madagascar

Philepittalges rotundus Atyeo, 1966 (monobasic)

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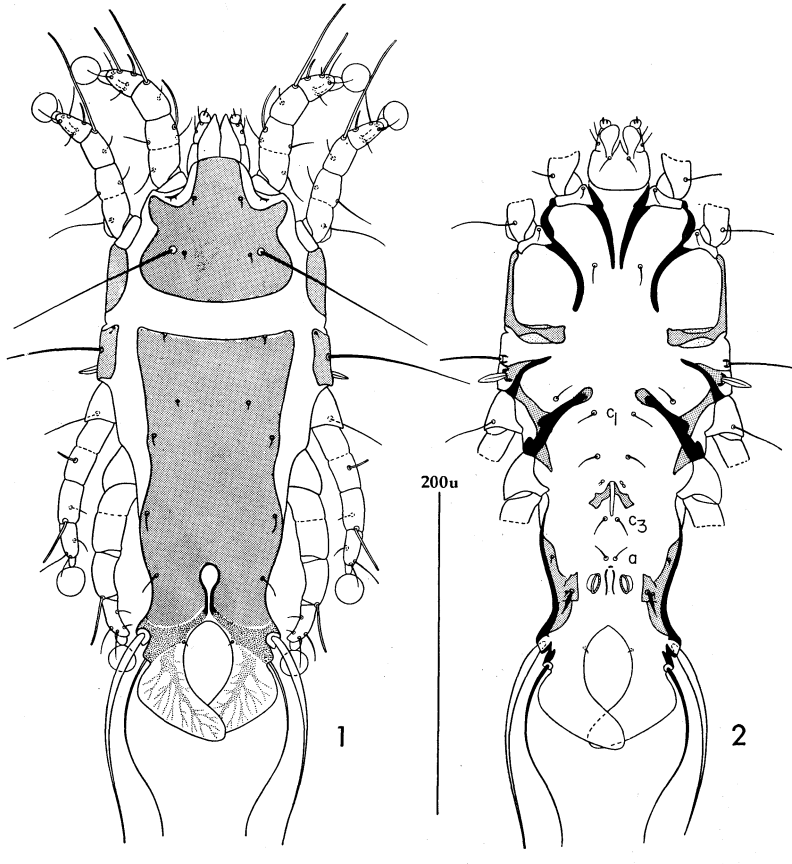
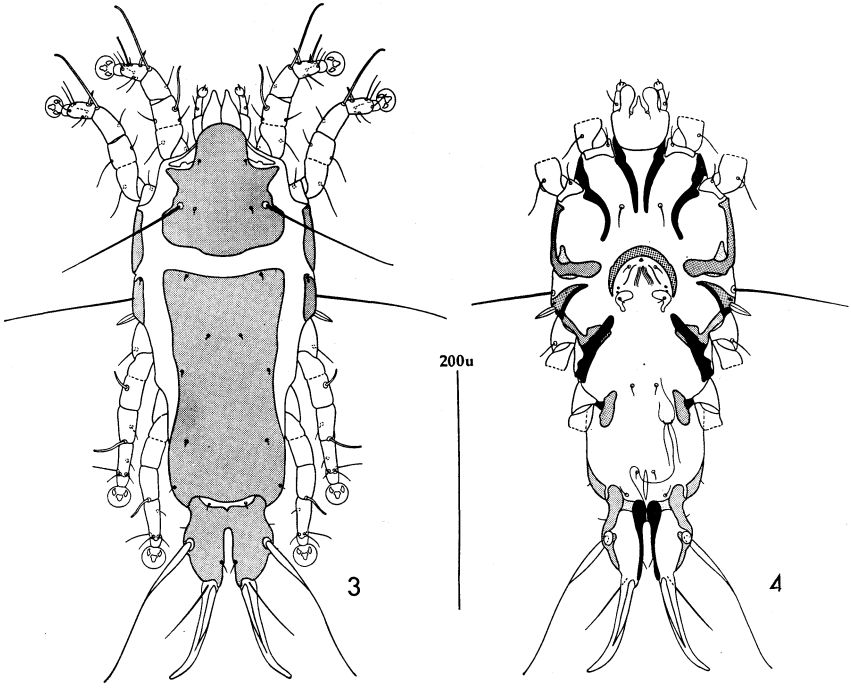
Pipridae—Brazil, Mexico, West Indies
Diproctophyllodes dielytra (Trt.), 1885, new combination
[= *D. exquisita* (Berla), 1959], new synonymy
Nycteridocaulus laticlunis Atyeo, 1966
Pittidae—Malaya
Proctophyllodes pittae Atyeo and Braasch, 1966
Rhinocryptidae—Chile
Tanyphyllodes scelorichilae Atyeo, 1966 (monobasic)
Tyrannidae—British West Indies, Mexico, United States
Anisophyllodes pipromorphae Atyeo, in press (monobasic)
Nycteridocaulus bilobatus Atyeo, 1966
N. foliatus Atyeo, 1966
N. lamellus Atyeo, 1966
N. pectinatus Atyeo, 1966
N. tyranni Atyeo, 1966



Figs. 1, 2. *Hemipterodectes squalocauda* Berla, male: dorsal (1) and ventral (2) aspects.



Figs. 3, 4. *Hemipterodectes squalocauda* Berla, female: dorsal (3) and ventral (4) aspects.

To conform to the terminology established by Atyeo and Gaud (1966), the genus *Hemipterodectes* is redescribed; to correct descrepencies in the original figures of *H. squalocauda,* the species is reillustrated (figs. 1–4).

Genus *Hemipterodectes* Berla

Hemipterodectes Berla, 1959*b*, Stud. Entomol., 2(1–4): 31.

Proctophyllodinae mites similar to species of *Proctophyllodes.* Male and female with setae *vi* and d_3 absent, with epimerites I convergent, free. Male with setae c_3 and *a* in linear arrangement, with terminal lamellae, with legs III slightly larger than legs IV, genital organ ensiform with broad supporting apodemes. Female with semicircular pregenital apodeme.

Type species: Hemipterodectes squalocauda Berla, 1959, from *Oxyruncus cristatus* (Swainson), Brazil (by original designation), figs. 1–4.

Genus *Diproctophyllodes,* new genus

Broad Proctophyllodinae mites with females similar to those of *Proctophyllodes.* Both sexes with setae *vi* absent, with epimerites I

divergent, free. Male with bilobed terminus similar to species of *Gabucinia* Oudemans (Pterolichidae), each lobe with median lamella, genital organ and supporting apodemes small, legs IV larger than legs III; both sexes with genua and femora of legs III–IV fused.

Type species: Proctophyllodes (Alloptes) dielytra Trouessart, 1885, from *Pipra erythrocephala* L. and *P. aureola* L., South America.

Derivation: Di, two + *Proctophyllodes.*

Diproctophyllodes dielytra (Trouessart), new combination

Proctophyllodes (Alloptes) dielytra Trouessart, 1885, Bull. Soc. Etud. Sci. Angers, 14: 66, from *Pipra erythrocephala* L. and *P. aureola* L. (Pipridae), South America.

Alloptes dielytra, Canestrini and Kramer, 1899, Tierreich, 7: 111.

Alloptes dielytra, Radford, 1953, Parasitol., 42(3, 4): 213.

Alloptes dielytra, Radford, 1958, Rev. Brasil. Entomol., 8: 148.

Brephosceles dielytra, Berla, 1959*a*, Bol. Mus. Nac., n.s., Zool., (209): 1–3, figs. 1, 2, from *Pipra erythrocephala rubrocapilla,* Brazil.

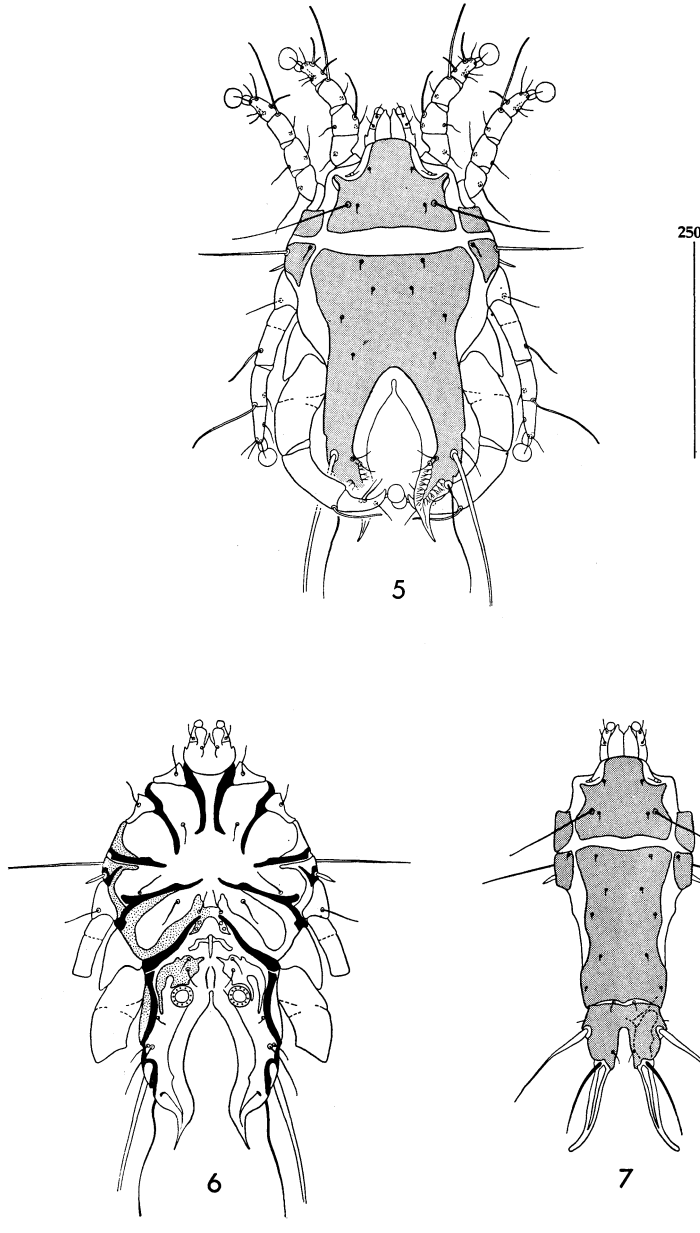
Brephosceles exquisitus Berla, 1959*a*, Bol. Mus. Nac., n.s., Zool., (209): 3–4, figs. 3, 4, from *Pipra erythrocephala rubrocapilla,* Brazil (New synonymy)

Trouessart's types (listed below) and the study specimens of the Nebraska collection are conspecific; the males have the surface fields surrounding the posterior epimerites of legs IV joined medially, have attenuate terminal lamellae each supported by a fingerlike sclerotization, and have the two pairs of ventral setae posterior to the genital organ inserted on a pair of small shields. Berla (1959*a*) recognized two species from the same subspecies of bird; each species had males with some of the characters listed above. From Berla's descriptions and drawings, it can be assumed that *dielytra* was redescribed from newly emerged males and *exquisitus* was described from a male having the apices of the terminal lamellae folded or deformed.

Type material. Lectotype ♂, lectoallotype ♀, 1 ♀ lectoparatype from *Pipra aureola* and *P. gutturalis,* Cayenne; 2 ♂♂, 5 ♀♀ lectoparatypes from *Pipra erythrocephala, Guyanes.* All types are in the Trouessart Collection.

Additional material. Pipridae: 1 ♂, *Manacus manacus,* West Indies; 1 ♂, 2 ♀♀, *Pipra erythrocephala rubrocapilla,* Brazil; 7 ♀♀, *P. erythrocephala,* South America.

Remarks. The drawings of the male are from the specimen from *Manacus manacus* and those of the female from the lectoallotype. The lectotypes are here designated for this species.



Figs. 5–7. *Diproctophyllodes dielytra* (Trouessart), male: dorsal (5) and ventral (6) aspects; female: dorsal aspect (7).

Diproctophyllodes oxyrunci, new species

This new species is unique for the subfamily Proctophyllodinae. The modification of the male terminus is similar to that found in species of the genus *Gabucinia* Oudemans (Pterolichidae). As noted previously (Atyeo, 1966), similar modifications repeatedly appear in various groups of feather mites; it is possible that other singular modifications will be found in the subfamily Proctophyllodinae.

MALE (holotype). Length, excluding legs I, 470μ; width at level of setae *sh*, 270μ. Dorsal idiosoma with broad shields; setae *vi* absent; setae d_3 and l_2 forming transverse row; terminus strongly bilobed, each lobe bearing lamella and setae d_4 and *pae* on internal margin. Ventral idiosoma with epimerites I divergent and free; setae cx_3, c_1 and c_2 in triangular arrangement; genital organ small, at level of anterior articulations of posterior legs. Legs IV enlarged and extending beyond idiosoma by length of tarsus IV; tarsus IV falciform and bearing seta on subterminal spine; legs III and IV with femora and genua partially fused.

FEMALE (allotype). Length, excluding legs I and terminal appendages, 390μ; terminal appendages, 88μ; width at level of setae *sh*, 197μ. Similar to *Proctophyllodes* females except wider and epimerites I not connected.

Type data. From *Oxyruncus cristatus* (Swainson) (Oxyruncidae), holotype ♂, allotype ♂, 2 ♂ ♂ paratypes, Parque Nacional do Itatiaia, Estado do Rio de Janeiro, Brazil, July 3, 1957; 2 ♂ ♂, 2 ♀ ♀ paratypes, 2 km. east of Horqueta, Concepcion dept., Paraguay, November 24, 1937; 2 ♀ ♀ paratypes, Venezuela, August 28, 1944, W. H. Phelps. The primary types are deposited in the University of Nebraska State Museum; secondary types are deposited at Nebraska and in the collection of J. Gaud, Rennes, France.

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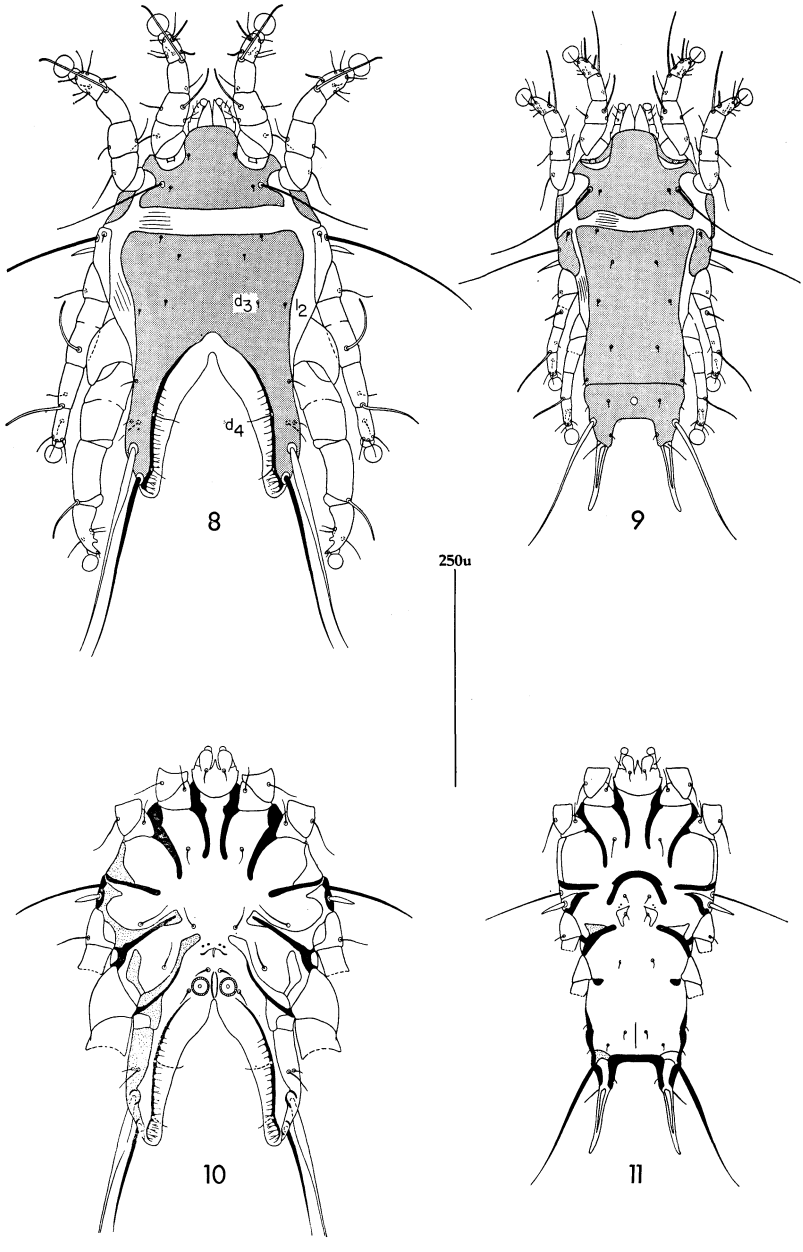

Figs. 8–11. *Diproctophyllodes oxyrunci*, new species, male: dorsal (8) and ventral (10) aspects; female: dorsal (9) and ventral (11) aspects.

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